

December 23, 1947.

Dr. R. C. Hockett,
Dept. of Chemistry,
Mass. Inst. Technology,
Cambridge, Mass.

Dear Dr. Hockett,

In a recent report of the Sugar Research Foundation- "Research in Process", I noticed a reference to the ethanolysis of sucrose. The abstract implied that ethyl fructoside (presumably the beta-) was produced in good yield from this reaction.

I am studying here the genetic control of saccharolytic enzymes, particularly in the colon bacillus. Mutations affecting the invertase activity of this organism would be of particular interest, but I require a differential substrate, such as β-ethyl fructoside would be. Are you in position to give out samples (5-10 gms.) or if necessary, even smaller, of this material in a fair state of purity (i.e. less than 1% contamination with fermentable sugars)? Such a favor would be greatly appreciated. I would also be interested in α-ethyl glucoside if that is equally available. The bacterium seems to be unable to split α-methyl glucoside although it is active on maltose and trehalose, and the results of varying the chain length of the aglycon should be of interest.

Finally, may I request a reprint of your paper on the ethanolysis when it appears.

Sincerely,

Joshua Lederberg
Assistant Professor of Genetics